



Canada Colors and Chemicals Limited

 CANADA COLORS & CHEMICALS LTD
 80 SCARSDALE ROAD
 DON MILLS, ONTARIO, CANADA M3B 2R7
 (416)-449-7750

PRODUCT: PARATENE X110

CODE: 240333

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... CANADA COLORS AND CHEMICALS LIMITED
 80 SCARSDALE ROAD,
 DON MILLS, ONTARIO
 M3B 2R7

PREPARED BY..... Regulatory Affairs
 PREPARATION DATE..... Aug26/05
 PRODUCT NAME..... PARATENE X110
 PRODUCT CODE..... 240333
 CHEMICAL FORMULA..... BLEND.
 MATERIAL USE..... REFER TO TECHNICAL LITERATURE.
 EMERGENCY PHONE NO..... (416)-444-2112.

Section 02: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route, Species	LC/50 Route, Species
SOLVENT NAPHTHA, (PET), LIGHT ALIPHATIC	30-60	SEE SECTION 11	64742-89-8	SEE SECTION 11	SEE SECTION 11
XYLENE	10-30	SEE SECTION 11	1330-20-7	SEE SECTION 11	SEE SECTION 11
METHYL ISOBUTYL KETONE (MIBK)	7-13	SEE SECTION 11	108-10-1	SEE SECTION 11	SEE SECTION 11
ETHYLBENZENE	1-10	SEE SECTION 11	100-41-4	SEE SECTION 11	SEE SECTION 11
SODIUM DIOCTYL SULPHOSUCCINATE	1-5	SEE SECTION 11	577-11-7	SEE SECTION 11	SEE SECTION 11
DECETH PHOPSHATE	1-5	SEE SECTION 11	68921-24-4	SEE SECTION 11	SEE SECTION 11
NAPHTHALENE	0.1-1	SEE SECTION 11	91-20-3	SEE SECTION 11	SEE SECTION 11

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
 SKIN CONTACT..... IRRITATION TO SKIN.
 SKIN ABSORPTION..... ABSORPTION MAY OCCUR THROUGH SKIN CONTACT OR FOLLOWING ACCIDENTAL INGESTION.

EYE CONTACT..... VAPOURS ARE MODERATELY IRRITATING TO THE EYES.
 INHALATION..... VAPOURS ARE MODERATELY IRRITATING TO RESPIRATORY PASSAGES.
 INGESTION..... THE LIQUID WHEN ACCIDENTLY ASPIRATED INTO LUNGS CAN CAUSE A SEVERE INFLAMMATION OF THE LUNG. IN RARE CASES MAY SENSITIZE HEART MUSCLE CAUSING HEART ARRHYTHMIA.

EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
 EFFECTS OF CHRONIC EXPOSURE..... PROLONGED AND REPEATED CONTACT WITH SKIN CAN CAUSE DEFATTING AND DRYING OF THE SKIN RESULTING IN SKIN IRRITATION AND DERMATITIS. PROLONGED EXPOSURE TO HIGH VAPOUR CONCENTRATION CAN CAUSE HEADACHE, DIZZINESS, NAUSEA, BLURRED VISION AND CENTRAL NERVOUS SYSTEM DEPRESSION. CONTAINS SUBSTANCE WHICH MAY BE TOXIC TO KIDNEYS, LUNGS AND LIVER. METHYL ISOBUTYL KETONE VAPORS (UP TO 1000 PPM) EXPOSED TO MALE RATS FOR 90 DAYS SHOWED EVIDENCE OF KIDNEY DAMAGE.

ADDITIONAL INFORMATION..... INHALATION IS THE PRIMARY ROUTE OF EXPOSURE ALTHOUGH ABSORPTION MAY OCCUR THROUGH SKIN CONTACT OR FOLLOWING ACCIDENTAL INGESTION. IN RARE CASES MAY SENSITIZE HEART MUSCLE CAUSING HEART ARRHYTHMIA. SOLVENT ABUSERS EXPOSED TO HIGH DOSES OF AROMATIC SOLVENTS (TOLUENE/XYLENE) SHOW SIGNS OF HEARING LOSS AS WELL AS DAMAGE TO THE BRAIN, LIVER AND KIDNEY. EXCESSIVE EXPOSURE TO XYLENE DURING PREGNANCY MAY BE HAZARDOUS TO THE DEVELOPING FETUS.

PRE-EXISTING CONDITIONS..... PRE-EXISTING EYE, SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

Section 04: FIRST AID MEASURES

INSTRUCTIONS:..... EYE CONTACT:.. FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. OBTAIN MEDICAL ATTENTION AS SOON AS POSSIBLE AFTER FIRST AID HAS BEEN INITIATED AND COMPLETED. SKIN CONTACT:.. FLUSH

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Section 04: FIRST AID MEASURES

INSTRUCTIONS:..... AFFECTED SKIN WITH GENTLY FLOWING LUKEWARM WATER FOR AT LEAST 20 MINUTES AND REMOVE CONTAMINATED CLOTHING WHILE RINSING. WASH CONTAMINATED SKIN WITH MILD SOAP AND WATER FOR 15 MINUTES. OBTAIN MEDICAL ATTENTION AS SOON AS POSSIBLE AFTER FIRST AID HAS BEEN INITIATED AND COMPLETED. INGESTION:.. DO NOT INDUCE VOMITING. GUARD AGAINST ASPIRATION INTO LUNGS BY HAVING THE INDIVIDUAL TURN ON TO THEIR LEFT SIDE. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. OBTAIN MEDICAL ATTENTION IMMEDIATELY. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. INHALATION:.. REMOVE VICTIM FROM FURTHER EXPOSURE AND RESTORE BREATHING, IF REQUIRED. OBTAIN MEDICAL ATTENTION.

NOTES TO PHYSICIAN:..... THE MAIN HAZARD FOLLOWING ACCIDENTAL INGESTION IS ASPIRATION OF THE LIQUID INTO THE LUNGS PRODUCING CHEMICAL PNEUMONITIS. IF MORE THAN 2.0 ML/KG HAS BEEN INGESTED, VOMITING SHOULD BE INDUCED WITH SUPERVISION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE VOMITING, GASTRIC LAVAGE WITH A CUFFED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED.

Section 05: FIRE FIGHTING MEASURES

FLAMMABILITY..... SEE FLASH POINT.
 IF YES, UNDER WHICH CONDITIONS?..... MAY BE IGNITED BY HEAT, SPARKS OR FLAMES.
 EXTINGUISHING MEDIA..... CARBON DIOXIDE, DRY CHEMICAL, FOAM. WATER FOG.
 SPECIAL PROCEDURES..... HANDLE AS A FLAMMABLE LIQUID. CLEAR AREA OF UNPROTECTED PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT ADEQUATE PROTECTIVE CLOTHING AND AN APPROVED POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. USE WATER TO COOL FIRE EXPOSED CONTAINERS. DO NOT USE A DIRECT STREAM OF WATER AS IT MAY SPREAD FIRE. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER. CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOUR PRESSURE BUILD UP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

FLASH POINT (C), METHOD..... 7.
 AUTO IGNITION TEMPERATURE..... N.AV.
 UPPER FLAMMABLE LIMIT (% BY VOL.).... 7.5.
 LOWER FLAMMABLE LIMIT (% BY VOL.)... 0.9.
 EXPLOSION DATA..... N.AV.
 EXPLOSIVE POWER..... N.AV.
 RATE OF BURNING..... N.AV.
 SENSITIVITY TO STATIC DISCHARGE..... YES.
 SENSITIVITY TO IMPACT..... NO.
 HAZARDOUS COMBUSTION PRODUCTS.. CARBON DIOXIDE, CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... ISSUE WARNING "FLAMMABLE". ELIMINATE ALL SOURCES OF IGNITION. HANDLING EQUIPMENT MUST BE GROUNDED. ISOLATE HAZARD AREA AND RESTRICT ACCESS. TRY TO WORK UP WIND OF SPILL. AVOID DIRECT CONTACT WITH MATERIAL. WEAR APPROPRIATE BREATHING APPARATUS (IF APPLICABLE) AND PROTECTIVE CLOTHING. STOP LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN LAND SPILLS; CONTAIN WATER SPILLS BY BOOMING. USE WATER FOG TO KNOCK DOWN VAPOURS; CONTAIN RUN-OFF. FOR LARGE SPILLS REMOVE BY MECHANICAL MEANS AND PLACE IN CONTAINERS. ABSORB RESIDUE OR SMALL SPILLS WITH ABSORBENT MATERIAL AND REMOVE TO NON-LEAKING CONTAINERS FOR DISPOSAL. RECOMMENDED MATERIALS: CLAY OR SAND. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. DISPOSE OF RECOVERED MATERIAL AS NOTED UNDER DISPOSAL CONSIDERATIONS. NOTIFY APPROPRIATE ENVIRONMENTAL AGENCY(IES).

Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND AVOID BREATHING VAPORS AND PROLONGED OR REPEATED CONTACT WITH EQUIPMENT SKIN. AVOID CONTACT WITH EYES. AVOID INGESTION. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. FIXED EQUIPMENT AS WELL AS TRANSFER CONTAINERS AND EQUIPMENT SHOULD BE GROUNDED TO PREVENT ACCUMULATION OF STATIC CHARGE. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS

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Section 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT ON OR NEAR CONTAINERS. HOT SURFACES MAY BE SUFFICIENT TO IGNITE LIQUID EVEN IN THE ABSENCE OF SPARKS OR FLAMES. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPOURS ARE GONE. DO NOT PRESSURIZE DRUM CONTAINERS TO EMPTY THEM. EMPTY CONTAINERS ARE HAZARDOUS, MAY CONTAIN FLAMMABLE/EXPLOSIVE DUSTS, LIQUID RESIDUE OR VAPOURS. USE WITH ADEQUATE VENTILATION. LAUNDRY CONTAMINATED CLOTHING PRIOR TO REUSE. AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA BEFORE LAUNDERING.

STORAGE NEEDS..... STORE IN COOL, DRY, WELL VENTILATED AREA, AWAY FROM HEAT AND IGNITION SOURCE. USE EXPLOSION PROOF VENTILATION TO PREVENT VAPOUR ACCUMULATION.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... IMPERVIOUS GLOVES SHOULD BE WORN AT ALL TIMES WHEN HANDLING THIS PRODUCT. CONTACT GLOVE MANUFACTURER FOR SPECIFIC INFORMATION.

RESPIRATORY/TYPE..... IF EXPOSURE EXCEEDS OCCUPATIONAL EXPOSURE LIMITS, WEAR A NIOSH-APPROVED RESPIRATOR. USE A NIOSH-APPROVED CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGES OR USE A NIOSH-APPROVED SUPPLIED-AIR RESPIRATOR. FOR HIGH AIRBORNE CONCENTRATIONS, USE A NIOSH-APPROVED SUPPLIED-AIR RESPIRATOR, EITHER SELF-CONTAINED OR AIRLINE BREATHING APPARATUS, OPERATED IN POSITIVE PRESSURE MODE.

EYE/TYPE..... CHEMICAL SAFETY GOGGLES AND/OR FULL FACE SHIELD TO PROTECT EYES AND FACE, IF PRODUCT IS HANLED SUCH THAT IT COULD BE SPLASHED INTO EYES.

CLOTHING/TYPE..... WEAR IMPERVIOUS PROTECTIVE CLOTHING.

OTHER/TYPE..... EYE BATH AND SAFETY SHOWER.

ENGINEERING CONTROLS..... MECHANICAL VENTILATION IS RECOMMENDED FOR ALL INDOOR SITUATIONS TO CONTROL FUGITIVE EMISSIONS. ELECTRICAL AND MECHANICAL EQUIPMENT SHOULD BE EXPLOSION-PROOF. CONCENTRATIONS IN AIR SHOULD BE MAINTAINED BELOW LOWER EXPLOSIVE LIMIT AT ALL TIMES OR BELOW THE RECOMMENDED THRESHOLD LIMIT VALUE IF UNPROTECTED PERSONNEL ARE INVOLVED. MAKE-UP AIR SHOULD ALWAYS BE SUPPLIED TO BALANCE AIR EXHAUSTED (EITHER GENERALLY OR LOCALLY). LOCAL VENTILATION RECOMMENDED WHERE MECHANICAL VENTILATION IS INEFFECTIVE IN CONTROLLING AIRBORNE CONCENTRATIONS BELOW THE RECOMMENDED OCCUPATIONAL EXPOSURE LIMIT. FOR PERSONNEL ENTRY INTO CONFINED SPACES (I.E. BULK STORAGE TANKS) A PROPER CONFINED SPACE ENTRY PROCEDURE MUST BE FOLLOWED INCLUDING VENTILATION AND TESTING OF TANK ATMOSPHERE.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID.

ODOUR..... CHARACTERISTIC.

ODOUR THRESHOLD..... N.AV.

VAPOUR PRESSURE (MMHG)..... N.AV.

VAPOUR DENSITY (AIR=1)..... N.AV.

EVAPORATION RATE..... N.AV.

BOILING POINT..... ~100-145.

PH..... N.AV.

SPECIFIC GRAVITY (WATER=1)..... 0.87.

SOLUBILITY IN WATER (% W/W)..... PARTIAL.

COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:
YES..... YES.

NO, WHICH CONDITIONS?
COMPATABILITY WITH OTHER
SUBSTANCES:
YES
NO, WHICH ONES?..... AVOID STRONG OXIDIZING AGENTS. ACIDS. XYLENE WILL ATTACK SOME FORMS OF PLASTICS, RUBBER AND COATINGS.

REACTIVITY CONDITIONS?..... AVOID EXCESSIVE HEAT, OPEN FLAMES AND ALL IGNITION SOURCES. SEE ABOVE.

HAZARDOUS POLYMERIZATION..... NO.

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Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... XYLENE: 100 PPM (STEL: 150 PPM). ETHYLBENZENE: 100 PPM (STEL: 125 PPM). SOLVENT NAPHTHA, LIGHT ALIPHATIC: 100 PPM. METHYL ISOBUTYL KETONE: 50 PPM, 205 MG/M3 (TLV/TWA) ACGIH. NAPHTHALENE: 10 PPM (TLV-TWA).

LC 50 OF MATERIAL, SPECIES & ROUTE.. XYLENE: 6700 PPM/4 H (INHALATION-RAT). ETHYLBENZENE: INHALATION-RAT = 4000 PPM FOR 4 HOURS. SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC: >3400 PPMV/4 HOURS, INHALATION-RAT. METHYL ISOBUTYL KETONE: INHALATION, RAT, 2000-4000 PPM, 4 HR.

LD 50 OF MATERIAL, SPECIES & ROUTE.. XYLENE (MIXED MONOMERS): 4300 MG/KG ORAL-RAT; >2000 MG/KG DERMAL-RABBIT. ETHYLBENZENE: ORAL-RAT = 3500 MG/KG; DERMAL-RABBIT = 17.8 ML/KG. SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC: >2000 MG/KG, ORAL-RAT; >2000 MG/KG, DERMAL-RAT. METHYL ISOBUTYL KETONE (MIBK):... >2080 MG/KG (ORAL-RAT); >20 ML/KG (DERMAL-RABBIT). NAPHTHALENE: 1780 MG/KG ORAL-RAT.

CARCINOGENICITY OF MATERIAL..... THIS PRODUCT CONTAINS ETHYLBENZENE. ETHYLBENZENE HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS.

TERATOGENICITY..... HIGH EXPOSURES TO XYLENE IN SOME ANIMALS STUDIES, OFTEN AT LEVELS TOXIC TO THE MOTHER, AFFECTED EMBRYO/FETAL DEVELOPMENT. THE SIGNIFICANCE OF THIS FINDING TO HUMANS IS NOT KNOWN.

IRRITANCY OF MATERIAL..... SEE SECTION 03.

ACUTE TOXICITY..... SOLVENT NAPHTHA (PET), LIGHT ALIPHATIC: MALE RATS EXPOSED FOR 90 DAYS BY INHALATION TO VAPOURS OF SIMILAR SOLVENTS SHOWED EVIDENCE OF KIDNEY DAMAGE. THE RELEVENCE OF THIS EFFECT TO MAN UNKNOWN.

SENSITIZING CAPABILITY OF MATERIAL. NONE.

ADDITIONAL COMMENTS..... MAY CONTAIN N-HEPTANE, CAS# 142-82-5.

Section 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY DO NOT ALLOW PRODUCT OR RUNOFF FROM FIRE CONTROL TO ENTER STORM INFORMATION OR SANITARY SEWERS, LAKES, RIVERS, STREAMS, OR PUBLIC WATERWAYS. BLOCK OFF DRAINS AND DITCHES. PROVINCIAL REGULATIONS REQUIRE AND FEDERAL REGULATIONS MAY REQUIRE THAT ENVIRONMENTAL AND/OR OTHER AGENCIES BE NOTIFIED OF A SPILL INCIDENT. SPILL AREA MUST BE CLEANED AND RESTORED TO ORIGINAL CONDITION OR TO THE SATISFACTION OF AUTHORITIES. MAY BE HARMFUL TO AQUATIC LIFE.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, PROVINCIAL, AND LOCAL ENVIRONMENTAL REGULATIONS.

Section 14: TRANSPORT INFORMATION

UN NUMBER..... 1993.
 TDG CLASSIFICATION..... 3.
 PACKING GROUP..... II.
 SPECIAL SHIPPING INSTRUCTIONS..... N.A.P.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... B2, D2A, D2B.
 CPR COMPLIANCE..... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

Section 16: OTHER INFORMATION

N.AV.=NOT AVAILABLE
 N.AP.=NOT APPLICABLE